



**MANUAL  
ON**

**Standards for the Competence of Operational and  
Maintenance Personnel.**

**FIRST EDITION**

**19 June 2011**

**CIVIL AVIATION AUTHORITY, BANGLADESH**

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## Foreword

In exercise of powers conferred by Rule 4 of Civil Aviation Rules 1984 (CAR 84), the Chairman of Civil Aviation Authority, Bangladesh (CAAB) is pleased to issue this Air Navigation Order (ANO) as a Manual on Standards for the Competence of Operational and Maintenance Personnel employed by certified Aerodrome Operators.

An Aerodrome certificate holder is expected to comply with the Rule 260C(4) laid down in the Civil Aviation Rules 1984 and Specifications of the Manual of Aerodrome Standards Bangladesh. There may be circumstances where compliance of requirement have not been followed at an existing aerodrome because of constraints of training facilities and/or administrative formalities. These situations require CAAB to establish procedures to develop ANO on Standards for the Competence of Operational and Maintenance Personnel employed by certified Aerodrome Operators.

This ANO is issued under the provisions contained in Rule 260C(4) of CAR 84 of CAAB and the CAAB Service Rules, 1988, published vide Bangladesh Gazette, Registered No. DA-1, Dated, 22 December 1988.

The responsibility for the technical matters with this ANO is the responsibility of the Flight Safety and Regulations Division of CAAB.

This ANO is issued and amended under the authority of the Chairman of Civil Aviation Authority, Bangladesh.



Air Cdre. Mahmud Hussain, ndc, psc  
Chairman of Civil Aviation Authority, Bangladesh  
Kurmitola , Dhaka-1229, Bangladesh.

## 1. Purpose

This Advisory Circular provides guidance to assess standards for the competence of Operational and Maintenance personnel employed by Certified Aerodrome Operators in Bangladesh to elaborate the requirement of CAR rule 260C(4).

## 2. Scope and Application

This Advisory Circular shall be applicable to evaluate the qualification/training and experience of the Aerodrome personnel (operational and maintenance) in order to assess their competence to perform all the critical activities for Aerodrome operations and maintenance.

## 3. Operational Personnel

There are 4 (four) categories of personnel involved in Aerodrome Operation:-

- 1) Air Traffic Controller(ATCO),
- 2) Communication(Operation)Officer,
- 3) ARFF personnel,
- 4) Aerodrome Security personnel.

### 3.1 Air Traffic Controller.

#### 3.1.1 Educational Qualification:

1<sup>st</sup> Class in Master Degree, or 2<sup>nd</sup> Class in Master Degree with 2<sup>nd</sup> Class in Honors, in Physics or Mathematics from any recognized University.

## 3.1.2 Institutional Training:

SN	ATC Unit	Training Requirement
I	Aerodrome/Approach Control	Successful completion of Basic ATC Course from Civil Aviation Training Center (CATC), Dhaka, or any other ICAO approved Training Institute.
ii	Area Control Center (Non-Radar)	Successful completion of Area Control (Non-Radar) course from Civil Aviation Training Center (CATC), Dhaka, or any other ICAO approved Training Institute.
iii	Approach Control (Radar)	Successful completion of Approach Control (Radar) course from any ICAO approved Training Institute.
iv	Area Control Center (Radar)	Successful completion of Area Control (Radar) course from any ICAO approved Training Institute.

## 3.1.3 On-the-Job Training (OJT):

Completion of required duration of OJT, as prescribed by Chairman, CAAB, under a qualified On-the-job Training Instructor(OJTI), in the concerned ATC Unit shall be required.

## 3.1.4 Competence check/Solo check :

After completion of the prescribed duration of OJT by the Trainee ATCO, and when the OJTI is satisfied with his performance, the OJTI shall recommend him/her for solo check. After that the trainee shall be check by a Board formed by Chairman CAAB, and on getting a satisfactory recommendation by the solo check Board Chairman CAAB will issue Certificate for solo duty in favour of that ATCO in that ATC unit. (Ref: ATSI 1/1984 & 1/2004).



### **3.2 Communication(Operation)Officer,**

#### 3.2.1 Educational Qualification:

1<sup>st</sup> Class in Master Degree, or 2<sup>nd</sup> Class in Master Degree with 2<sup>nd</sup> Class in Honors, in Physics/ Chemistry/ Mathematics or Statistics from any recognized University.

#### 3.2.2 Institutional Training:

Successful completion of Basic Communication (Operation) Course from Civil Aviation Training Center (CATC), Dhaka, or any other ICAO approved Training Institute.

#### 3.2.3 Familiarization Training:

After completion of Basic Communication Operation course, the Trainee officer shall be posted to a Communication Unit where they shall get familiarization with the real time job and eventually acquire competence for the job.

### **3.3 ARFF personnel.**

#### 3.3.1 Educational Qualification.

##### 3.3.1(a) for ARFF Officers :

Master Degree in Chemistry from any recognized University.

##### 3.3.1(b) for ARFF Crew :

H.S.C or equivalent qualification from any Education Board

#### 3.3.2 Institutional Training:

##### 3.3.2(a) for ARFF Officers :

Successful completion of Basic CFR Course from Civil Aviation Training Center (CATC), Dhaka, or any other ICAO approved Training Institute.

### 3.3.2(b) for ARFF Crews :

Successful completion of Elementary CFR Course for AFO, Basic FOD course for FOD's and Basic FAC course for FAC's , from Civil Aviation Training Center (CATC), Dhaka, or any other ICAO approved Training Institute.

### 3.3.3 On-the-job Training (OJT)

#### 3.3.3(a) for ARFF Officers :

During Institutional Training the ARFF Officers shall perform sufficient practice on driving /operation of the CFR vehicle's, and acquire sufficient knowledge on the Airport Movement Area and Layout of the surrounding area, and shall attain competence for real time job.

#### 3.3.2(b) for ARFF Crews :

During Institutional Training the FOD and AFO's shall perform sufficient practice on driving /operation of the CFR vehicle's, and acquire sufficient knowledge on the Airport Movement Area and Layout of the surrounding area, and shall attain competence for real time job.

## **3.4 Airport Security Officer:**

### 3.4.1 Educational Qualification:

1<sup>st</sup> Class in Master Degree, or 2<sup>nd</sup> Class in Master Degree with 2<sup>nd</sup> Class in Honors, in any subject from any recognized University.

### 3.4.2 Institutional Training:

Successful completion of Basic Security Course from Civil Aviation Training Center (CATC), Dhaka, or any other ICAO approved Training Institute.

### 3.4.3 Familiarization Training:

During Institutional Training the Security Officer shall acquire sufficient knowledge on the Airport Security Equipment, handling of dangerous goods, Anti-hijack technique and all other subjects related to Airport security. They shall also have sufficient knowledge about the Airport Movement Area and Layout of the surrounding area, and shall attain competence for real time job.

## **4 .Maintenance personnel:**

The following categories of personnel are involved in the Aerodrome maintenance:

- 1) Civil Engineering personnel;
- 2) Electrical/Mechanical Engineering personnel;
- 3) Communication Engineering personnel.

### **4.1 Civil Engineering personnel:**

#### 4.1.1 Educational Qualification:

Bachelor in Engineering (civil) from any recognized University.

#### 4.1.2 Institutional Training:

There is no mandatory requirement for Basic Institutional training.

#### 4.1.3 On-the-Job Training (OJT) / Familiarization:

After being posted to Airport Engineering division, Engineers shall get familiarization with the real time job and eventually acquire competence for the job. They shall acquire sufficient knowledge about:

- i) all Aerodrome facilities, installations & Nav. aids on and around the aerodrome;
- ii) concerned works safety procedures;
- iii) aerodrome design & capital expenditure maintenance programme;
- iv) regular maintenance programme;
- v) ICAO Annex 14, CAR 84, MAS & Aerodrome SMS CAAB,
- vi) human factor & Wildlife hazard management;
- vii) aerodrome certification & Inspection;
- viii) air side driving & phraseology.

## 4.2 Electromechanical Engineering personnel:

### 4.2.1 Educational Qualification:

Bachelor in Engineering (Electrical / Mechanical) from any recognized University.

### 4.2.2 Institutional Training:

There is no mandatory requirement for Basic Institutional training.

### 4.2.3 On-the-Job Training (OJT) / Familiarization:

After being posted to Airport Engineering division Engineers shall get familiarization with the real time job and eventually acquire competence for the job. They shall acquire sufficient knowledge about:

- i) all Aerodrome facilities & installations, Aerodrome lighting system, Boarding bridge and Nav. aids on and around the aerodrome;
- ii) concerned works safety procedures;
- iii) aerodrome design & capital expenditure maintenance programme;
- iv) regular maintenance programme;
- v) ICAO Annex 14, CAR 84, MAS & Aerodrome SMS CAAB,
- vi) human factor & Wildlife hazard management;
- vii) aerodrome certification & Inspection;
- viii) air side driving & phraseology.

### **4.3 Communication Engineers :**

#### **4.3.1 Educational Qualification:**

1<sup>st</sup> Class in Master Degree, or 2<sup>nd</sup> Class in Master Degree with 2<sup>nd</sup> Class in Honors, in Physics/ Mathematics, or Bachelor in Engineering in Electrical & Electronics from any recognized University.

#### **4.3.2 Institutional Training:**

Successful completion of Basic Communication (Engineering) Course from Civil Aviation Training Center (CATC), Dhaka, or any other ICAO approved Training Institute.

#### **4.3.3 Familiarization Training:**

During the Basic Communication Engineering course, the Trainee Communication Engineering shall get familiarization with the different types of Communication, Navigation and Surveillance equipment, and eventually acquire competence for real time job.

### **5.Effectivity**

This ANO comes into effect on 19 June 2011. Aerodrome Operators are advised to establish their Training Facilities, prepare their Training Programme, forward them for approval by Chairman, CAAB, and implement

the training programme as per approval.